



Application No.: 09/380,614
Examiner: N. Woodall
Art Unit: 3733

LIST OF CURRENT CLAIMS

1. (Currently Amended) Implant for osteosynthesis device particularly of the backbone, comprising a bone anchoring device (4) topped by a fixing head (3) constituted by two lateral branches (5) forming an open U and designed to receive a linking rod (6) ~~with a view to immobilization thereof by clamping, via, and~~ a threaded nut (6) adapted to screw on corresponding threaded parts produced on the partially cylindrical outer walls (5a) of the lateral branches of the fixing head (3), ~~characterized in that wherein~~ the nut (6) comprises, ~~in its diametral zone,~~ a plate (8) mounted in free rotation in and extending diametrically across an open cylindrical inner part of the nut, the plate having a width such that two lateral clearances are defined on either side of said plate in order to allow passage of the branches of the fixing head inside the nut whereby the plate is allowed to slide between the branches.

2. (Currently Amended) Implant for osteosynthesis device according to ~~Claim claim~~ 1, ~~characterized in that the width (L) of the plate (8) is adapted to allow the slide of said plate between the branches (5) of the fixing head, defining two lateral clearances (9) on either side of said plate (8) in order to allow passage of the branches (5) of the U inside the nut (6) and wherein said two lateral clearances are configured to permit the insertion of two pins (11) of an auxiliary tool (10) for gripping the nut (6) in order to facilitate assembly thereof on the fixing head (3).~~

3. (Currently Amended) Implant for osteosynthesis device according to ~~Claim claim~~ 1, characterized in that the fixing head (3) comprises two grooves (12) made opposite on the inner walls (5b) of the U-shaped branches (5) in order to ensure, after assembly of the rod (4), the guiding of pins (11) of a tool (10) on the fixing head (3) and a blind indexing of the plate (8) between the U-shaped branches (5) of said head (3), before and during clamping of the nut (6) which supports it, via the same tool (10).

4. (Currently Amended) Implant for osteosynthesis device according to ~~Claim~~ claim 3, characterized in that the plate (8) comprises, on its lateral edges (8a), two notches (13) defining, in complement and in cooperation with the guiding grooves (12) of the U-shaped branches (5) of the fixing head (3), housings (12/13) intended for the introduction and positioning of pins (11) of a tool (10).

5. (Currently Amended) Implant for osteosynthesis device according to ~~Claim~~ claim 4, characterized in that the notches (13) form, in the edges (8a) of the plate (8), quadrangular baffles intended for housing the extensions (14) of the pins (11) of a tool (10).

6. (Currently Amended) Implant for osteosynthesis device according to ~~Claim~~ claim 4, characterized in that the surface (8b) of the plate (8) is concave and congruent of the surface of the cylindrical rod (4) and knurled for a better adherence on said rod (4).

7. (Currently Amended) Tool for setting the implant for osteosynthesis device according to Claim 1, ~~characterized in that it is constituted by~~ comprising a cylindrical sleeve (16) ~~comprising~~ having an end part (17) forming a female hexagonal endpiece (18), ~~on the one hand,~~ adapted to cooperate with the nut (6) of the implant and ~~on the other hand,~~ into which opens out a bore (19) ~~intended for axial slide of~~ slidably receiving a sliding member, (20) ~~and in that~~ said sliding member (20) ~~comprises~~ comprising an emerging end (21) ~~constituted by~~ having two partially cylindrical lateral branches (22) forming an open U and of which the outer walls (24) are threaded so as to allow screwing of the nut (6) on the tool, while allowing free slide of the plate (8) of said nut (6) between the threaded branches (22) of the tool (10), so that the nut (6), previously screwed on the branches (22) of the tool (10) can, after its positioning on the fixing head (13) via its pins (11) in the grooves (12) of the U-shaped branches (5) of said head (3), be transferred directly from the threading (24) of the tool (10) to the threading (5a) of the head (3) via the hexagonal endpiece (18) actuated in rotation by the operator, while immobilizing the sliding member (20) likewise by rotation.



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REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

Priority

The examiner has asserted that "if applicant desires to claim the benefit of a prior filed application under 35 U.S.C. 120, a specific reference to the prior-filed application must be included in the first sentence of the specification following the title or in an accompanying application data sheet.

Applicant notes that priority is claimed to French application 97 03 277, under 35 U.S.C. 119. Applicant's claim for priority is made in the executed declaration filed on January 7, 2000 (as well as in the unexecuted declaration filed on September 17, 1999).

It is respectfully submitted that, since the priority claim is made under the provisions of 35 U.S.C. 119, the requirement for cross reference under 35 U.S.C. 120 does not apply.

The examiner is requested to acknowledge Applicant's claim for priority based on the French application 97 03 277 in the next Office communication.

Examiner interview

Applicant appreciates the courtesy extended to Applicant's representative during the course of a brief telephonic interview conducted on August 17, 2006. Applicant's representative contacted the examiner to inquire as to the status of claim 7, which was not addressed in the recent Office Action.

The examiner informed Applicant's representative that claim 7, not claim 6, was objected to, and that a rejection directed to claim 6 should have identified claim 7 instead.

Accordingly, it is understood that claim 7 stands objected to, and rejected as set forth in paragraphs 8 and 11.

Objection to the drawings

Revised Figs. 1, 2, and 6 are shown in the "Replacement Sheets" of drawing appended herewith. Figs. 1 and 2 have been corrected to delete the reference numerals 14 and 23 because they are not listed in the specification. Fig. 6 has been corrected to delete the reference numeral 23, and to replace an incorrect instance of reference numeral 24 with the reference numeral 26, which is listed in the specification but was not shown in the drawings. Applicant notes that, as referenced in the specification, reference numeral 26 refers to an upper zone 26 of the cylindrical sleeve. The upper zone 26 of the cylindrical sleeve was previously, and incorrectly, identified on the drawing by the reference number 24.

Claim objections

Claim 7 presently stands objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. This objection is respectfully traversed. It is respectfully submitted that claim 7 is an independent claim. Applicant notes that claim 1 is directed to a device, and claim 7 is directed to a tool for setting the device. Applicant further notes that the examiner has treated claim 7 as an independent claim for examination purposes.

For at least these reasons, withdrawal of the objection is requested.

Rejection of claim 7 under 35 U.S.C. § 112, second paragraph

Claim 7 presently stands rejected as being indefinite. In particular, the examiner asserts that the statements "on the one hand" and "on the other hand" recited in the claim make the claim indefinite. Claim 7 has been amended to eliminate these statements, and to better conform to U.S. claim drafting style and practice. In view of the amendment, withdrawal of the rejection is requested.

Rejection of claims 1-6 under 35 U.S.C. § 102(b)

Claims 1-6 presently stand rejected as being anticipated by Metz-Stavenhagen (EP 672388A1). This rejection is respectfully traversed for at least the following reasons.

Claim 1 has been amended to more clearly set forth the present invention, and to better conform to U.S. claim drafting style and practice.

The present invention comprises, briefly, a bone anchoring device, and a threaded nut adapted to screw onto corresponding parts of the bone anchoring device. The nut comprises a plate mounted in free rotation in and extending diametrically across an open cylindrical inner part of the nut. The plate has a width such that two lateral clearances are defined on either side of the plate in order to allow passage of the branches of the fixing head inside the nut, whereby the plate is allowed to slide between the branches.

Metz-Stavenhagen fails to disclose or suggest a nut having such a freely rotatable plate extending diametrically across an open cylindrical inner part of the nut and having a width such that two lateral clearances are defined on either side of the plate in order to allow passage of the branches of the fixing head inside the nut, whereby the plate is allowed to slide between the branches. Accordingly, Metz-Stavenhagen does not anticipate claim 1.

In an embodiment shown in Metz-Stavenhagen's Figs. 6 and 7, a set screw 50 is shown in conjunction with a nut 46. However, there is no teaching or suggestion of any lateral clearance defined on either side of the set screw 50. Therefore, the set screw 50 cannot be construed as a plate having a width such that two lateral clearances are defined on either side of the plate.

Further, there is no teaching or suggestion that the set screw 50 is mounted in free rotation, or that the set screw 50 extends diametrically across an open cylindrical inner part of the nut to define lateral clearances.

Therefore, for at least these reasons it is respectfully submitted that Metz-Stavenhagen does not anticipate claim 1, and therefore claim 1 and claims 2-6 which

depend from claim 1 are allowable over the cited reference. Accordingly, withdrawal of the rejection is requested.

Rejection of claim 7 under 35 U.S.C. § 102(b)

Claim 7 presently stands rejected as being anticipated by Johnson (U.S. 5,941,885). This rejection is respectfully traversed for the following reasons.

Claim 7 sets forth a tool comprising a cylindrical sleeve having a bore slidably receiving a sliding member. The sliding member comprises an emerging end having two partially cylindrical lateral branches forming an open U. Outer walls of the lateral branches are threaded to allow a nut to be screwed onto the tool.

It is respectfully submitted that Johnson fails to disclose or suggest a sliding member comprising an emerging end having two partially cylindrical lateral branches forming an open U. Further, there is no teaching or suggestion of any such lateral branches or any other part of an emerging end of a sliding member being threaded to allow a nut to be screwed onto the tool.

Instead, Johnson shows a single projection 77 extending from an end of the tool. There is no teaching or suggestion that the single projection 77 is threaded to allow a nut to be screwed onto the tool. Instead, "the projection 77 is sized for insertion into the cylindrical bore 35 in the set screw 1." (*Johnson*; col. 7, lines 65-66).

Therefore, Johnson cannot anticipate claim 7, because Johnson fails to disclose or suggest each and every element set forth in claim 7. Accordingly, it is respectfully submitted that claim 7 is allowable over the cited reference, and withdrawal of the rejection is requested.

Conclusion

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-7 be allowed and the application be passed to issue.


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If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

BACON & THOMAS, PLLC
625 Slaters Lane, Fourth Floor
Alexandria, Virginia 22314-1176
Phone: (703) 683-0500

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Respectfully submitted,


JOHN R. SCHAEFER
Attorney for Applicant
Registration No. 47,921